IN THE CLAIMS

Please amend claims 1-26 to the following:

1. (Currently Amended) A method comprising:

disposing an interlayer dielectric on an underlying layer, the underlying layer having an underlying conductor;

etching a via and a trench in the interlayer dielectric exposing at least a portion of the underlying conductor;

forming an organic monolayer on the exposed portion of the underlying conductor;

~~sealing~~ lining the surfaces of the interlayer dielectric, so as to line the via and the trench; and

removing the organic monolayer, re-exposing the portion of the underlying conductor.

2. (Currently Amended) The method of claim 1, wherein ~~sealing~~ lining the surfaces of the interlayer dielectric comprises: lining the interlayer dielectric with a thin dense film.

3. (Currently Amended) The method of claim 2, wherein the thin dense film is selected from the group consisting of SiN, SiO_2, ~~or~~ and SiC.

4. (Currently Amended) The method of claim 1, wherein ~~sealing~~ lining the surfaces of the interlayer dielectric comprises: forming a barrier layer over the surfaces of the interlayer dielectric.

5. (Original) The method of claim 4, wherein the barrier layer comprises tantalum.

6. (Currently Amended) The method of claim 1, wherein lining the interlayer dielectric comprises: exposing the surfaces of the interlayer dielectric to plasma, so as to seal the interlayer dielectric.

7. (Original) The method of claim 1 wherein the organic monolayer comprises a functionalized long chain organic molecule.

8. (Currently Amended) The method of claim 7, wherein the functionalized long chain organic molecule is selected from the group consisting of thiols, phosphines, amines, alcohols, carbonyls, ~~or~~ and carboxylic acids.

9. (Original) The method of claim 1, wherein the organic monolayer is removed by thermal processing.

10. (Original) The method of claim 1, wherein the organic monolayer is removed by oxidation.

11. (Original) The method of claim 10, wherein formaldehyde is used to oxidize the organic monolayer.

12. (Original) The method of claim 1, wherein dip-coating is used to form the organic monolayer.

13. (Original) The method of claim 1, wherein spin-coating is used to form the organic monolayer.

14. (Original) The method of claim 1, wherein the organic monolayer is sprayed on.

15. (Original) The method of claim 1, wherein the metal conductor comprises copper.

16. (Original) The method of claim 1, wherein the interlayer dielectric comprises dielectric material and pores.

17. (Original) The method of claim 16, wherein the dielectric material comprises an oxide.

18. (Original) The method of claim 16, wherein the dielectric material comprises a polymer.

19. (Currently Amended) A method comprising:

chemisorbing a protective organic layer selectively onto a portion of conductive material, wherein the conductive material is in a porous dielectric.

sealing the surfaces of the porous dielectric; and

desorbing the protective organic layer to ~~expose~~ re-expose the portion of conductive material.

20. (Original) The method of claim 19, wherein the protective organic layer comprises a long chain organic molecule.

21. (Currently Amended) The method of claim 20, wherein the long chain organic molecule is selected from a group consisting of thiols, phosphines, amines, alcohols, carbonyls, ~~or~~ and carboxylic acids.

22. (Original) The method of claim 20, wherein chemisorbing comprises exposing the conductive material to a vapor containing the long chain organic molecule.

23. (Original) The method of claim 20, wherein chemisorbing comprises exposing the conductive material to dilute solution containing the long chain organic molecule.

24. (Original) The method of claim 19, wherein sealing comprises: depositing a thin film sealant on the porous dielectric.

25. (Original) The method of claim 19, wherein desorbing comprises: heating the porous dielectric, the protective organic layer, and the conductive material.

26. (Original) The method of claim 19, wherein desorbing comprises: oxidizing the protective organic layer.

27. (Withdrawn) An interconnect structure comprising:

a via and a trench defined by an interlayer dielectric disposed above an underlying layer, the underlying layer having a conductor; and

a sealant layer disposed on the surface of the interlayer dielectric, wherein the sealant layer lines the interlayer dielectric leaving the underlying conductor exposed.

28. (Withdrawn) The interconnect structure of claim 27, wherein the sealant layer never formed on the conductor.

29. (Withdrawn) The interconnect structure of claim 27, wherein the interlayer dielectric comprises dielectric material and pores.

30. (Withdrawn) The interconnect structure of claim 29, wherein the dielectric material comprises an oxide.

31. (Withdrawn) The interconnect structure of claim 29, wherein the dielectric material comprises a polymer.

32. (Withdrawn) The interconnect structure of claim 27, wherein the sealant layer is a thin dense film.

33. (Withdrawn) The interconnect structure of claim 32, wherein the thin dense film is selected from the group consisting of SiN, SiO_2, or SiC.

34. (Withdrawn) The interconnect structure of claim 27, wherein the sealant layer is a barrier layer comprising tantalum.